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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/262,839	03/05/1999	KAORI NAKAYAMA	520.36997X00	1062

7590 12/03/2003  
ANTONELLI TERRY STOUT AND KRAUS  
SUITE 1800  
1300 NORTH SEVENTEENTH STREET  
ARLINGTON, VA 22209

EXAMINER

HYUN, SOON D

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/262,839

Applicant(s)

NAKAYAMA ET AL.

Examiner

Soon-Dong Hyun

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-8, 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments with respect to claims 1-8 and 13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, it is not clear whether the stored cells in lines 10-11 refer to "the cells" in line 17 of claim 1.

Regarding claim 6, it is not clear whether the stored cells in lines 11-12 refer to "the cells" in line 17 of claim 1.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-3, 7, 8, and 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie et al (U.S. Patent No. 5,550,823) in view of Fichou et al (U.S. Patent No. 5,790,522)

Regarding claims 1 and 13, Irie et al (Irie) discloses an ATM switch connected to a plurality of input lines and output lines for forwarding cells received from each of the input lines to one of the output lines (FIG. 1) comprising:

a switch unit (11), having a plurality of input ports (14) and output ports (15) which outputs fixed length cells received from each of the input ports to one of the output ports specified by routing information contained in the cell header of the cells (col. 3, lines 40-44);

a plurality of input line interfaces (input circuits 1-N), each connected to one of the input ports, wherein each of the input line interfaces has a cell output controller (input buffer unit 2) which stores the cells received from the one of the input lines in queues (22) for each output line according to degree of priority (delay quality class, see col. 3, line 56-col. 4, line 11); and

a plurality of output line interfaces (output buffer unit 12), each connected to one of the output ports which stores output cells received from the one output port and send out the cells to one of the output lines.

However, Irie differs from the present application in that each input interface has no function to receive variable length packets from each input line to convert the variable length packets to fixed length cells and accordingly, each output interface has no function to convert the

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fixed length cells to variable length packets to send out variable length packets to each output line.

Fichou et al (Fichou) et al discloses that an ATM switch having a receiver adaptor (20) for each input line to receive variable length packets and convert the variable length packets to cells and a transmit adaptor for each output line (22) to convert the cells to variable length packets to send out the variable length packets to the output line.

Those of skilled in the art would have been motivated by Fichou to incorporate a receive adaptor and a transmit adaptor into Irie to receive variable length packets and to convert the variable length packets to fixed length cells for switching, wherein it is well known that there are advantages for switching cells than switching variable length packets as taught by Fichou, see col. 3, lines 9-46.

Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a receive adaptor and a transmit adaptor into Irie to receive variable length packets and to convert the variable length packets to fixed length cells for switching.

Regarding claims 2, 3, 7, and 8, Irie further discloses a monitor device (a detector 13) which detects congestion status (congestion status of output buffer unit 12) of cells for each output lines by monitoring the quantity of stored cells to notify the congestion status to each input line interface, whereby the cell output controller selectively prohibits the forwarding of cells according to the degree of priority, see col. 7, lines 18-53.

***Allowable Subject Matter***

7. Claims 9-12 are allowed.

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8. Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

10. Any response to this action should be mailed to:

Commissioner for Patents

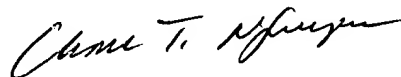
P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: 703-872-9306 for formal communications intended for entry with a label of "OFFICIAL" and for informal or draft communications with a label of "PROPOSED" or "DRAFT" (attn: Art Unit 2663, Soon-Dong Hyun).

S. Hyun

11/28/2003



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